REPORT ON SERVICE DELIVERY OPTIONS FOR VISN 12 EXECUTIVE SUMMARY

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This report presents the results of Booz·Allen & Hamilton's (Booz·Allen) Pilot Program study of options for delivering veteran healthcare services in 2010 to veterans in the Department of Veterans Affairs (VA) Integrated Service Network (VISN) 12—The Great Lakes Health Care System. This study is focused on answering the question, "*What health care service delivery options best meet future veteran health care needs and provide enhanced health cares services, while assuring highest quality care and optimal access for a defined veteran population in the most cost-effective manner*?" The study also presents the implications of these options with respect to capital assets management.

This Executive Summary provides a brief overview of VA's CARES initiative, the study methodology, projections of veteran population in 2010, planning principles, results of the market-driven approach to defining options, brief descriptions of the options developed, data for evaluating each option using the VA-established criteria, and a sensitivity analysis. The body of the report provides further details on each of these topics and is supported by data presented in appendices.

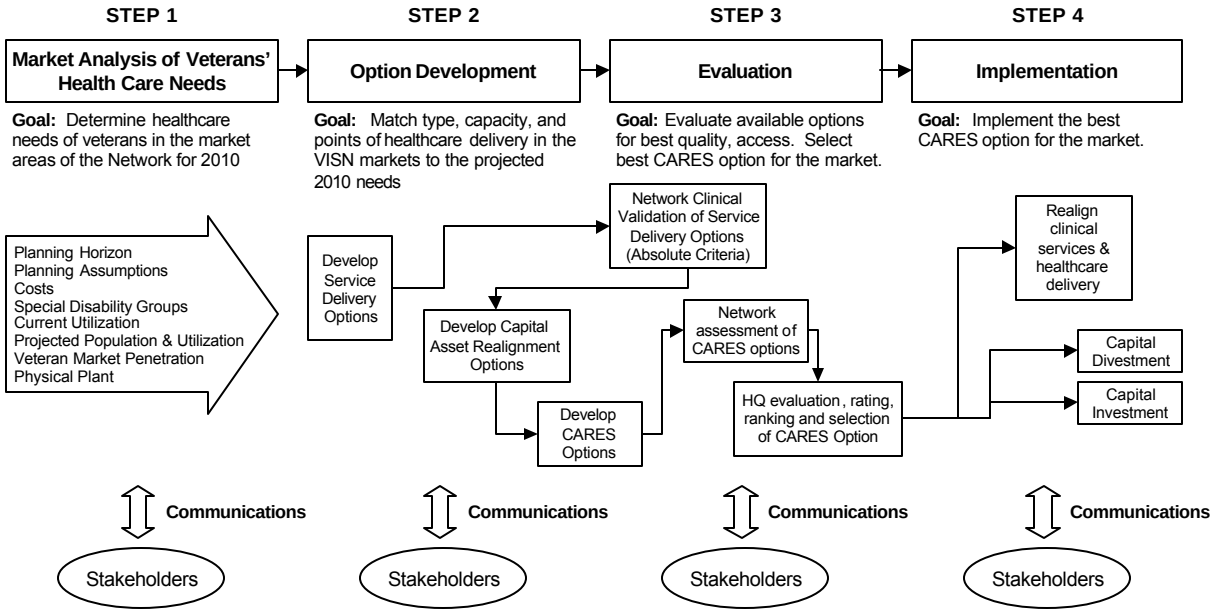
1. VA EMBARKED ON ITS CARES INITIATIVE TO ENSURE THAT ITS CAPITAL INFRASTRUCTURE WOULD MEET VETERANS' NEEDS FOR HEALTHCARE SERVICES IN 2010 AND BEYOND.

VA has undertaken profound change over the past decade to ensure that its healthcare system meets the healthcare needs of veterans. Nevertheless, VA managers recognize that veterans' demographics and health needs are changing, and the tools and practices of healthcare continue to change dramatically. Both VA and Congress recognized that the VA healthcare infrastructure, which was largely designed a half century or more ago, will not continue to be satisfactory—for patients, for physicians, or for employees. In particular, the cost of operating and maintaining the current facilities is high and these resources could be redirected and spent on direct patient care. To address this situation, VA developed the CARES initiative, whose objectives are to—

> "assess veterans' health care needs in each VISN, identify service delivery options to meet those needs, promote corresponding strategic realignment of capital assets linked to those needs, and thereby improve VA's access, quality and delivery of health care in the most accessible and cost-effective manner, while mitigating impacts on staffing and communities and on other Department of Veterans Affairs' missions."

To develop a strategic baseline for future healthcare facilities, VA designed a planning process (called CARES) that uses a market-based approach to deciding where healthcare facilities should be located in 2010 to meet the projected healthcare needs of veterans. Exhibit 1 presents this four-step process as originally defined by VA.

Exhibit 1. VA's Process for the CARES Initiative



VA's approach involved conducting a market analysis for each VISN, which would form the basis for developing healthcare Service Delivery Options (SDOs) that would meet the veterans' needs in 2010. To help with this intensive data-driven effort, VA contracted with Booz·Allen & Hamilton. VA contracted separately with Condor Technology Solutions, Inc., who commissioned Milliman & Robertson, Inc. to prepare the projections of veteran demographics using actuarial data and techniques. VA also conducted an internal effort to develop what are called Absolute and Discriminating Criteria for evaluating the SDOs.

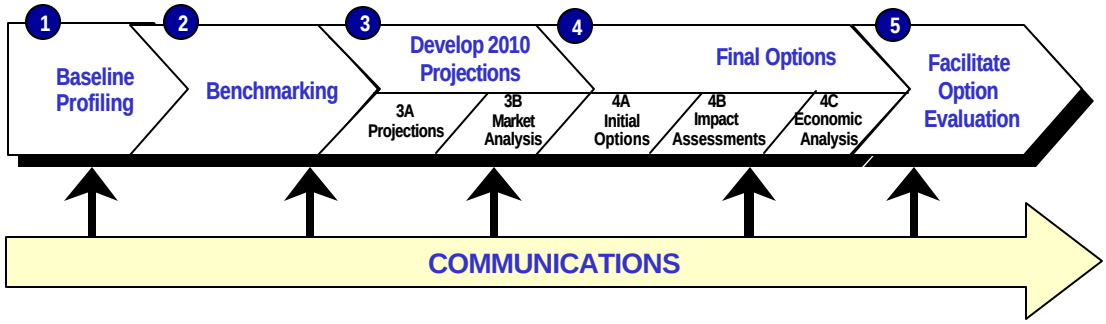
VISN 12, The Great Lakes Health Care System, was selected as the pilot for the CARES initiative. VA envisioned the pilot as "the application of the CARES evaluation criteria to a previous CARES-like option study." In 1999, VISN 12 performed the previous study in conjunction with AMA Systems, Inc. and McGladrey & Pullen. That study resulted in six options for healthcare delivery in the Chicago area. The CARES process, however, requires a comprehensive review of the entire VISN, which was not undertaken in the original study. This requirement created the need for options to be defined beyond those of the 1999 study. In addition, an initial review of the original six options indicated that for the most part, they would not pass the Absolute Criteria, which also indicated that a new set of options needed to be developed.

Once VA makes the decision about the strategy for delivering healthcare services in a VISN by selecting an option, VA will have a strategic foundation for full development of facility capital investment plans. It is this plan that will provide the framework for decisions on specific capital projects. Major projects that exceed the established cost threshold must be submitted to VA's Capital Investment Board for approval and funding. At the time these requests are prepared, detailed implementation plans will be developed.

2. BOOZ·ALLEN DEVELOPED A DATA-DRIVEN STUDY METHODOLOGY TO DEFINE A RANGE OF HEALTHCARE SERVICE DELIVERY OPTIONS.

Booz·Allen used a five-step process to create and refine the SDOs for VISN 12, as shown in Exhibit 2. The first four steps correspond to Steps 1 and 2 of the overall VA CARES process, and the fifth step supports CARES' third step (as was presented in Exhibit 1).

Exhibit 2. BA&H Five-Step Process Methodology



Step 1—Baseline Profiling. We documented current inpatient and outpatient services by type and location, as well as current workload, costs, staffing, and space. We also conducted a physical inspection and identified maintenance or upgrades needed or planned. In addition, we collected information about community and DoD healthcare resources available throughout the VISN.

Step 2—Benchmarking. We obtained VA and other select public and private sector benchmarks for productivity, quality of care, and patient access.

Step 3A—Projections. We analyzed the VA actuary's projections of the veteran population and demographics, and developed demand figures for inpatient and outpatient healthcare services. With direction from VA, we developed projections for special populations (including spinal cord injury/disease and blind rehabilitation) and used VA demand models for long-term care. We also developed models for converting outpatient actuary data to a format reflecting VA operating practices.

Step 3B—Market Analysis. Through geographic modeling of the demand projections, we analyzed the impact on veterans of providing healthcare services at different locations. We characterized the density of veterans to define three distinct markets for healthcare services within VISN 12.

Step 4A—Develop Options. We developed a set of SDOs for each of the three markets in VISN 12, describing how inpatient, ambulatory care, special disability programs, mental health programs, and extended care could be delivered.

Step 4B—Impact Assessments. We analyzed the impacts of each option and prepared data for the application of the absolute and discriminating criteria, including a sensitivity analysis. We collected data from patients about their satisfaction with current services.

Step 4C—Economic Analysis. We projected the life-cycle cost of implementing each option, comparing it to a status quo scenario in which current physical plant was renovated. The cost for each capital project for each option was also estimated.

Step 5—Facilitate Option Evaluation. We prepared materials to be used in facilitated discussions about the options and the Absolute and Discriminating Criteria.

Communications with all audiences (Veterans Service Organizations, employees, Congress) occurred throughout the study.

VA provided the data on workload, staffing, space, services, and current costs. Under a separate contract with VA, Milliman & Robertson, Inc. provided the projections of veteran populations and their demographics. The translation of the actuarial data into a format that reflected VA operating practices was accomplished using a methodology Booz·Allen developed in partnership with VA subject matter experts.

3. THE OPTIONS WILL BE EVALUATED BY VA EXPERTS USING A TWO-STEP PROCESS.

The VA will evaluate the options using a two-step process. The first step applies a set of "Absolute Criteria." Options must pass through this first screen on a simple pass/fail basis before consideration by the second set of evaluation criteria. The Absolute Criteria are composed of a single top-level criterion and two subcriteria, as follows:

- Health Care Quality and Need (Pass/Fail)
  - Healthcare Needs and Requirements/Clinical Analysis
  - Safety and Suitable Environment

The second set of evaluation criteria are called "Discriminating Criteria." These criteria provide the evaluators with a way to assign scores to a range of detailed criteria. These criteria have pre-determined weightings associated with them. Thus, through the application of the discriminating criteria, the options can be rank ordered in terms of overall score. The top level of the discriminating criteria includes:

- Health Care Quality as Measured by Access
- Health Care Quality as Measured by Veteran Satisfaction
- Staffing and Community Impact
- Support Other Missions of VA
- Optimizing Use of Resources

After the scoring takes place, these options are evaluated further by the National CARES Steering Committee (NCSC). The NCSC then makes a recommendation to the VA Undersecretary of Health, who in turn makes a recommendation to the Secretary.

4. VISN 12 CURRENTLY PROVIDES A FULL CONTINUUM OF HEALTHCARE SERVICES TO APPROXIMATELY 219,960 VETERANS THROUGH EIGHT VA MEDICAL CENTERS, SPECIALIZED CLINICS, 29 COMMUNITY BASED OUTPATIENT CLINICS, FIVE NURSING HOMES, AND CONTRACTED SERVICES WITH OTHER HEALTHCARE PROVIDERS.

The eight VA Medical Centers (VAMCs) are shown on Map 1, Current Facilities and Catchment Areas. Together, they provide the full continuum of care, including acute inpatient care, extended care, ambulatory care, special disability programs, and mental health programs to 219,960 enrolled veterans in FY 2000. Today, each VAMC has a primary service area. Veterans seeking VA care usually receive their care from the facility in the primary service area; however, veterans may seek and receive care outside their primary service area. The VAMCs provide access to care for veterans through hospital-based clinics, emergency departments, or VA-owned or leased community-based outpatient clinics (CBOCs). Of special note, VA resources are also focused on providing extensive care to eight special disability groups as follows:

- Spinal Cord Injury
- Blind Rehabilitation
- Traumatic Brain Injury
- Amputation
- Severely Mentally Ill
- Substance Abuse
- Homeless
- Post Traumatic Stress Disorder (PTSD)
- PTSD Severely Mentally Ill

In addition to its primary mission of providing patient care to its veteran population, VISN 12 performs a number of other missions, including the following:

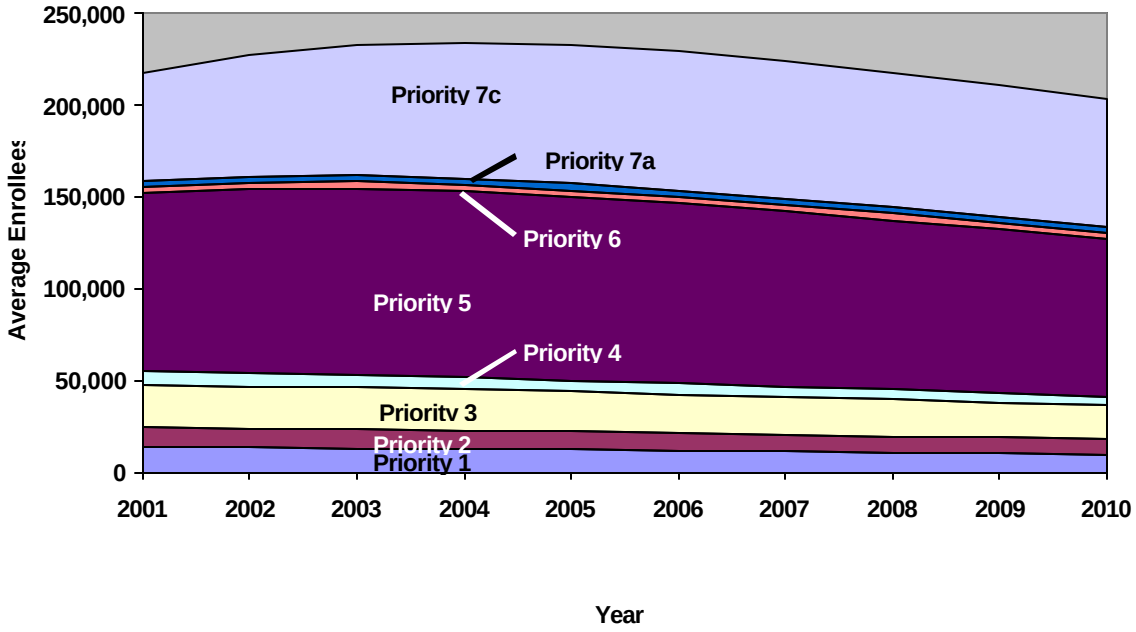
- Research—VISN 12 will conduct more than $42 million of research in FY 2001, both VA and non-VA-funded, to improve the healthcare of veterans.
- Education—VISN 12 has academic affiliations with six medical schools and funds approximately 650 residents in FY 2001. In addition, the VISN has affiliations with four dental schools, 32 nursing schools, and 121 allied health schools.
- DoD Contingency—Each of the VISN healthcare facilities has a role in providing backup to DoD in a national emergency or military action.

In planning the delivery of healthcare services to veterans, the CARES study team considered the impacts on these other missions.

Historically, the utilization of VA healthcare services varies by enrollee Priority Level (VA has defined seven Priority Levels that determine the benefits a veteran is entitled to receive, with Priority Level 1 being the most severely disabled). This data is important for future planning due to shifts in the

population in each Priority Level. Veterans who are in Priority Levels 1 through 6 have had the highest average utilization of healthcare services in the VA system (about 95 percent of inpatients in VISN 12). Veterans classed as Priority Level 7, which is the fastest growing portion of the enrollment, are served on an "as available" basis, and typically use fewer services. Projections of the number of enrollees by Priority Level are shown in Exhibit 3. As shown in the FY 2001 totals, enrollment levels are projected to be approximately 217,600 with a projected increase to approximately 230,000 in FY 2004, followed by a gradual decline. Fiscal year 2010 enrollment is projected to be 7 percent lower than projected 2001 enrollment. Priority 5 veterans make up the largest group of enrollees and compose almost half of the total enrollees.

Exhibit 3. Projected Enrolled Population by Priority Level



As previously noted, special disability groups of veterans have unique requirements, many of which are legislated in terms of capacity requirements. Many of these services are co-mingled and therefore are difficult to accurately project for ten years; although for the purposes of this study, separate projections (indicated earlier) were made. The demand for ambulatory care services and for outpatient surgery services is expected to grow slightly, compared with FY 2000.

The projected numbers of enrolled veterans, grouped into the three markets previously shown, represent the veterans who will be the projected customers of VA healthcare services in 2010. Projections of where the customers will be living and the types of healthcare services they will seek allowed the CARES study team to determine where services should be located.

5. THE CARES PLANNING PROCESS USES A MARKET-DRIVEN/NEED-BASED APPROACH TO FIND WAYS TO ENHANCE HEALTHCARE SERVICES TO VETERAN ENROLLEES.

The CARES study team, working with VA staff and other experts, examined a broad range of subjects before formulating service delivery options. Nine major areas of study are listed below:

- 2010 Demand Projections
- Planning Benchmarks
- Markets
- Facility Conditions
- Community Resources
- Evaluation Criteria
- Veteran Survey Results
- Sensitivity Analysis
- Cost

The results of these study areas yielded many details for consideration. For the purpose of this summary however, there are three important data points. They include:

- The enrollee demand projections show a peak in about 2004 and then a decline of about 7 percent from today's level (≈220,000 enrolled in 2000 vs. ≈203,000 enrolled in 2010).
  - 18 percent decline in Categories 1–6 (from 158,173 enrollees to 130,314 enrollees for 2010).
  - 18 percent increase in Category 7 (from 61,877 enrollees to 72,595 enrollees in 2010).
  - Categories 1–6 have the highest utilization, composing approximately 95 percent of inpatient population.
  - VISN-wide approximately 18.5 percent of veterans are enrolled.
- Because many of VISN 12's facilities are old, they do not meet today's design standards for privacy, accessibility, and usability.
- VISN 12 segments into three markets based upon population concentration, distance to VA facilities, and other characteristics. The markets and their principal characteristics are illustrated in the table below.

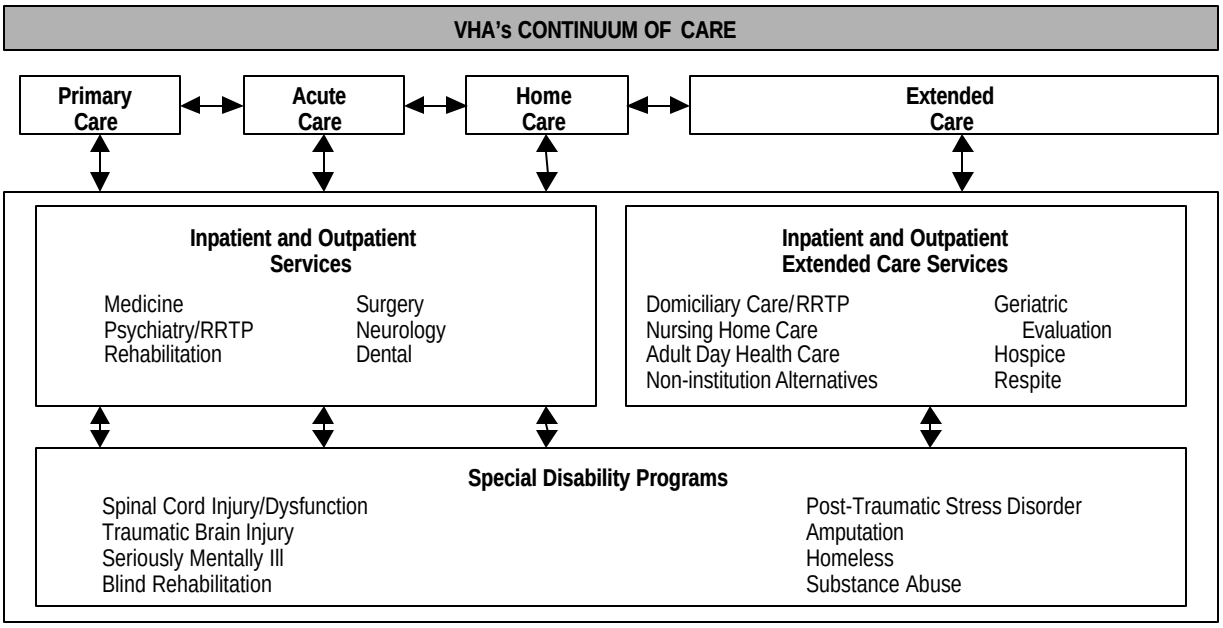
Market	Characteristic	Projected 2010 Enrollees
Northern	Rural	15,933 enrollees 10,182 in Categories 1-6 5,751 in Category 7
Central	Largely rural with some urban and suburban	76,605 enrollees 46,438 in Categories 1-6 30,167 in Category 7
Southern	Largely urban and suburban	108,660 enrollees 72,629 in Categories 1-6 36,031 in Category 7

These natural geographic enrollee markets provided the basic structure for developing SDOs. Map 2, Enrolled Veteran Population FY2010 with Markets, after this page shows the three markets and the distribution of enrollee population.

6. DESIGNING A HEALTHCARE SYSTEM INVOLVES PROVIDING A FULL CONTINUUM OF CARE IN A TIERED FASHION.

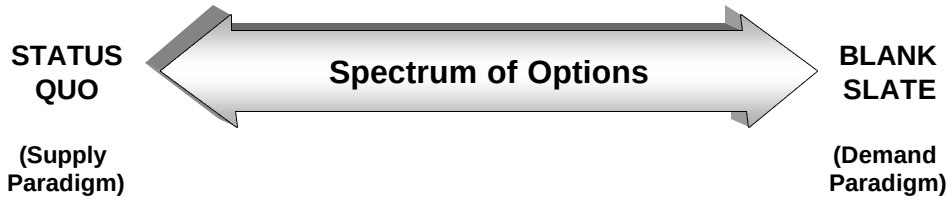
VA's healthcare system is comprehensive, covering the full continuum of care, as shown in Map 2, Enrolled Veteran Population FY2010 with Markets. The expectations for service and the number of patients needed to ensure that quality is maintained vary for each stage of the continuum—thus, a tiered delivery system is necessary to cost-effectively meet these needs. Each tier builds from the last, providing the patient with a progressive model in which more intense and complex services can be delivered as they are required. From the provider's point of view, the tiers provide a "feeder" model, in which clinics support facilities providing more acute care, both relieving those facilities of less care-intense patients and sending more complex illnesses to a facility better equipped to serve them.

Exhibit 4. Continuum of Healthcare



In defining a spectrum of options for delivering healthcare, the ends of the spectrum can be characterized as "supply-based" and "demand-based." A supply-based model starts with the current facilities and services, that is, the status quo; a demand-based model starts with the services required and the population location, and presumes no existing facilities, that is, a blank slate. This concept is shown graphically in Exhibit 5. Neither end of this spectrum provides a viable model for VISN 12.

Exhibit 5. Spectrum of Planning Models



If VA were developing its healthcare delivery system now, the location of its facilities would undoubtedly be different. Further, the location of facilities not only would be decided by considering the location of veteran populations; but also, VA would need to balance the practical realities of academic affiliations, affordability of land, and the role of government agencies as "good citizens" and employers (that is, current equity and affiliations). The reality is that VA's healthcare system is not a blank slate. VA has a current set of facilities, and these facilities must be considered when developing options.

The Booz·Allen Team considered these perspectives in developing options for providing healthcare service. The options presented in this report place different amounts of emphasis on the various perspectives; and thus, they fall at different points on the spectrum. To create these options, Booz·Allen had to make many decisions in consultation with VA staff and other experts. While there can be countless variations on the options, Booz·Allen was directed to provide a manageable number to facilitate decision-making.

7. A VARIETY OF OPTIONS WERE DEVELOPED FOR DELIVERING HEALTHCARE TO VETERANS, EACH WITH ITS OWN ADVANTAGES AND DISADVANTAGES.

Within any of the markets, there are competing opportunities for providing healthcare. Among these are decisions regarding:

- Whether to emphasize existing locations, affiliations, and patterns or not
- Whether to close facilities and redistribute workload
- Whether to renovate/rebuild in place and maintain ownership or not
- Whether to negotiate Enhanced Use agreements and lease back beds to take advantage of scalability

- Whether to centralize or decentralize in urban locations
- Whether to contract for services.

With these factors in mind, and considering lessons from the 1999 study performed by AMA Systems, Inc. and McGladrey & Pullen, the team developed a variety of schemes for the delivery of healthcare in VISN 12. (See Appendix H.)

Each market has a different fundamental issue related to locating the healthcare facilities. The options for each market address that issue. In all options, ambulatory care and specialized clinics are aggressively addressed, with Community-Based Outpatient Clinics (CBOCs) distributed throughout the VISN for ease of access. Based upon the above principles, Booz·Allen developed nine options: four for the Southern Market, three for the Central Market, and two for the Northern Market as described below.

The emphasis in the description of the option is on the location of the acute inpatient services—this is necessary because the decision about the location of a hospital is a major investment, whereas the decisions about the other types of facilities (e.g., CBOCs, nursing homes) can be changed more easily. It is important to remember that the veteran accesses healthcare through the system of primary care facilities; and in any given year, approximately 80 percent of veterans' interactions with the VA healthcare system occur on an outpatient basis.

The key drivers and conclusions for each of the markets are summarized below.

- Southern
  - Based on projected demand adjusted for migration, 159-190 acute care beds are needed in the city limits of Chicago
  - There is need for suburban medical centers
  - Approximately 94% of enrollees are within the CARES program access standard for specialized ambulatory care and acute inpatient care
  - Key question is, what are the trade-offs between and among supply paradigm options vs. demand paradigm options?
- Central
  - Milwaukee submarket has a large veteran population center, while the remainder are significantly smaller
  - Approximately 80% of enrollees are within the CARES program access standard for specialized ambulatory care and acute inpatient care
  - Key question is, what roles could or should the existing facilities have going forward?

- Northern
  - The very rural nature, sparse enrollee population, and large area drive the options
  - Approximately 35% of enrollees are within the CARES program access standard for specialized ambulatory care and acute inpatient care
  - Key question is, to what extent is access/travel time a determinant for option development?

Regardless of which option might be selected in each market, the team's intent is to meet the demand projections and provide for enhanced services and care. The demand data and facility data show a need for increased ambulatory care, more inpatient surgical beds, and renovated or new SCI and Blind Rehabilitation facilities.

In the Southern Market, four options were developed that take different approaches to balance current equity and to take advantage of Enhanced Use opportunities. Travel time is not an issue in the Southern Market. The four options are summarized below and described in the paragraphs that follow.

Option A	• Closest to the status quo • Emphasize existing relationships, locations, use patterns • Balance facility ownership with the scalability that comes with leasing back beds in Enhanced Use agreements • Propose DoD-VA sharing • Relies on suburban hospitals to serve veterans outside the city • Maintain/expand Ambulatory Care Center in market
Option B	• Centralize City of Chicago inpatient care • Own the inpatient med/surg beds • Propose DoD-VA sharing • Rely on suburban hospitals to serve veterans outside the city • Maintain/expand Ambulatory Care Center in market
Option C	• Centralize City of Chicago inpatient med/surg care • Enhance use lease back of med/surg beds • Propose DoD-VA sharing • Relies on suburban hospitals to serve veterans outside the city • Maintain/expand Ambulatory Care Center in market
Option D	• Share the workload between the city and the suburban submarkets • Own the med/surg beds • Propose DoD-VA sharing • Maintain/expand Ambulatory Care Center in market

- **Option A would construct one small VA hospital and, through an Enhanced Use arrangement, lease medical/surgical beds in the city of Chicago.** This option is the closest to the status quo scenario. A 98-bed acute care facility (a new hospital) would be built on top of the West Side Ambulatory Care Center, then the current West Side Hospital would close. Through an enhanced use arrangement, Northwestern Memorial Hospital would acquire the current Lakeside property and construct a new hospital on that site. VA would lease back approximately 79 medical and surgical beds in the new facility. Hines would be renovated but its mission would not change. It would continue to supply SCI services and a new Blind Rehabilitation center would be built. North Chicago would be renovated; DoD sharing is proposed, but there would be no change in mission.

- **Option B would place a single hospital at West Side in the city of Chicago.** The current West Side Hospital would be renovated to provide a total of 177 beds. Lakeside would discontinue inpatient services, and the property would be available for sale or Enhanced Use. Hines would be renovated but have no change in mission. It would continue to supply SCI services, and a new Blind Rehabilitation center would be built. North Chicago would be renovated; DoD sharing is proposed, but there would be no change in mission.

- **Option C would provide medical/surgical inpatient care in the city of Chicago through an Enhanced Use arrangement that permits VA to lease-back beds.** The Lakeside property would be acquired by Northwestern Memorial Hospital, who then builds a new hospital on that site. VA would lease back 128 acute beds. A 60-bed mental health facility would be built on top of the West Side Ambulatory Care Center; then the current West Side medical/surgery inpatient hospital would close. Hines would be renovated but would have no change in mission. It would continue to supply SCI services and a new Blind Rehabilitation center would be built. North Chicago would be renovated; DoD sharing is proposed, but there would be no change in mission.

- **Option D would divide inpatient workload from the city submarket between a newly constructed small VA hospital and a large VA hospital in the neighboring submarket.** A 98-bed acute care facility (a new hospital) would be built on top of the West Side Ambulatory Care Center; then the current West Side medical/surgery inpatient hospital would be mothballed. Lakeside inpatient services would be discontinued, and the Lakeside property would be available for sale or enhanced use. Hines would be renovated and would add acute beds to support city workload, but otherwise have no change in mission. It would continue to supply SCI services, and a new Blind Rehabilitation center would be built. North Chicago would be renovated; DoD sharing is proposed, but there would be no change in mission.

In the Central Market, the primary questions revolve around balancing access/travel time with current equity. The three options for the Central Market are summarized below and described further in the paragraphs that follow.

Option E	• Preserve existing locations, affiliations, and use patterns • Negotiate enhanced use agreements • Contract out med/surg beds for veterans with long travel times • Expand Ambulatory Care with new CBOCs
Option F	• Same as E, but no contracting
Option G	• The most emphasis on existing locations, affiliations, and use patterns • Own all the beds • Expand Ambulatory Care with new CBOCs

- **Option E would outsource with private providers to meet demand in submarkets far from a VAMC, while leveraging the relationship with an existing affiliate to lease acute beds.** Through an enhanced use arrangement, the Madison VAMC would be acquired by the University of Madison. The VA would lease back 44 acute beds. Tomah and Milwaukee would be renovated but have no fundamental change in mission. Milwaukee would continue to supply SCI services. Inpatient and specialized ambulatory services would be purchased in the private sector in submarkets more than 90 to 120 minutes from a VAMC. Three new CBOCs would be built—at Green Bay, WI; Wisconsin Rapids, WI; and Freeport, IL. Approximately 98 percent of enrollees would be within the CARES access standards for specialized ambulatory care and acute inpatient care.

- **Option F would leverage the relationship with an existing affiliate to lease acute beds.** Through an Enhanced Use arrangement, the Madison VAMC would be acquired by the University of Wisconsin. VA would lease back 62 acute beds. Tomah and Milwaukee would be renovated but have no fundamental change in mission. Milwaukee would continue to supply SCI services. In contrast to Option E, services would not be routinely purchased from the community in remote areas; therefore, approximately 80 percent of enrollees would be within the CARES access standards for specialized ambulatory care and acute inpatient care. Three new CBOCs are proposed—Green Bay, WI; Wisconsin Rapids, WI; and Freeport, IL.

- **Option G would sustain the Madison VAMC by adding nursing home beds.** Approximately 75 nursing home care beds would be relocated from Tomah to Madison to bring Madison to full occupancy. Tomah and Milwaukee would be renovated but have no fundamental change in mission. Milwaukee would continue to supply SCI services. Approximately 80 percent of enrollees would be within the CARES access standards for specialized ambulatory care and acute inpatient care. Three new CBOCs are proposed—Green Bay, WI; Wisconsin Rapids, WI; and Freeport, IL.

In the Northern Market, which is very large and very sparsely populated, the issue is whether to rely more heavily on the private sector to help improve access. The two options for the Northern Market are summarized below and described further in the paragraphs that follow.

Option H	• Preserve existing locations, affiliations, and use patterns • Negotiate Emphasize access/travel time • Contract for some acute care beds • Contract for some specialty ambulatory services • Contract out med/surg beds for veterans with long travel times • Expand Ambulatory Care with a new CBOC
Option I	• Emphasize the existing facility • Expand Ambulatory Care with a new CBOC

- **Option H would leverage private sector capacity to enhance access.** The Iron Mountain VAMC would be renovated and would provide mostly long-term care, along with 8 acute care beds. Inpatient and specialty ambulatory services would be purchased in the private sector in submarkets that are more than 90 to 120 minutes from the Iron Mountain VAMC. The unique telemedicine capability would be retained and a new CBOC would be built in Delta County. Approximately 83 percent of enrollees would be within the CARES access standards for specialized ambulatory care and acute inpatient care.
- **Option I would emphasize the use of the existing VA facility.** Similar to Option H, except there would be no private sector contracting in remote areas. Consequently, Iron Mountain VA would provide 30 acute beds. The facility would be renovated and the unique telemedicine capability would be retained. Only about 35 percent of enrollees would be within the CARES access standards for specialized ambulatory care and acute inpatient care. A new CBOC in Delta County is proposed.

Options were provided by market to allow VA to separately consider how to best serve each market, taking into consideration veteran preferences, capital expenditure requirements, and other factors. All options provide renovated and modernized facilities and improved healthcare services to veterans. A complete "Option" for VISN 12 thus involves the selection of one option for each of the three markets, Northern, Central, and Southern.

8. VA WILL EVALUATE THE OPTIONS AGAINST THE ESTABLISHED CRITERIA, CONSIDER FACTORS THAT MAY ALTER PLANNING ASSUMPTIONS, AND OBTAIN FEEDBACK FROM VETERANS AND OTHER STAKEHOLDERS.

As previously discussed, VA has developed a set of Absolute Criteria and a set of weighted Discriminating Criteria. The CARES process calls for the options to be evaluated against the criteria. The evaluation will yield a score to help decision makers chose among the options.

After the options have been evaluated against the criteria, VA will also need to review them in light of the planning assumptions and their sensitivity to change. We have identified seven factors that could affect the number of veterans who seek healthcare services from VA:

- Projection of enrolled veterans in 2020
- Unmet demand from veterans who are eligible but do not use VA healthcare resources
- VA/DoD resource sharing opportunities
- Fluctuations in the economy
- Military conflicts
- Changes to Medicare benefits
- Changes in medical practice and technology.

How likely each of these is to occur is a matter of debate. However, this environmental scan provides information to inform that debate. Furthermore, the options are evaluated by how well they can respond to changes in workload created by unpredictable events. This feature is described as the "scalability" of an option.

9. THE SELECTED OPTIONS, TOGETHER WITH THE FACILITY DATA AND ANALYSIS IN THIS REPORT, PROVIDE A STRATEGIC "BLUEPRINT" FOR VA'S TEN YEAR ASSET REALIGNMENT FUNDING DECISIONS ON INDIVIDUAL PROJECTS.

Exhibit 6, following, summarizes the estimated ten-year capitalized facility costs for the baseline and each of the defined options. As shown:

- If no explicit decision on service delivery options is made (and essentially no real capital improvements), the "No Change" line, then approximately $149 million (constant 2001 dollars) will be spent on capitalized facility maintenance projects (essentially maintenance only) over the next ten years.

- If capital improvements are made to meet current safety and suitability standards for all facilities while maintaining the current missions without realignment of assets, the "Renovate To Standard" line, then approximately $332 million as a rough order of magnitude (constant 2001 dollars) will need to be spent on facility renovations.

- Depending upon which set of "Overall Options" (one each for Northern, Central, and Southern markets) is selected for healthcare service delivery, capital asset facility development projects will require $110 million to $140 million (constant 2001 dollars).

The selected service delivery options, together with the facility condition, cost, and capital asset project needs defined in this report, then provide strategic blueprint for future funding of VA's capital assets. The selection of options will determine (1) what the total capital cost of facilities will be, and (2) which projects will be funded.

Exhibit 6. Ten Year Capital Costs, Millions Of Dollars

OPTION	CAPITAL INVESTMENT DESCRIPTION	HINES	CHCS			N. CHICAGO	MADISON	MILWAUKEE	TOMAH	IRON MOUNTAIN	TOTAL 10 YR CAPITAL COST
			WEST SIDE	LAKESIDE	TOTAL						
"No Change" 10 Year Cost Baseline	10 year project average of VISN 12 capital expenditures on facilities	$38.0			$30.0	$22.0	$13.0	$29.0	$9.2	$8.2	**$149.4 Million**
Renovate To Standard	Full slab-to-slab renovations including primary services in inpatient areas, cosmetic and minor structural renovations to ambulatory care	$74.7	$26.4	$19.1	$45.5	$66.7	$12.2	$81.4	$42.3	$8.9	**$331.7 Million**
Lowest Capital Cost Overall Option (Combined Options B, G, & H)	Contract in Central and Northern; EU for Lakeside and Madison; renovate WS	32.6	16.2	15.0	31.2	7.6	8.9	16.9	8.0	4.7	**$110.0 Million**
Highest Capital Cost Overall Option (Combined Options A, F, & I)	Keep and renovate Lakeside; keep and renovate Madison; no contracting in central or northern markets	32.5	19.9	27.3	47.2	7.6	20.0	16.9	12.1	7.6	**$143.9 Million**

Note: VA Office of Facilities Management – Facility Condition Assessment database identifies $146.9M to correct the most critical systems and infrastructure issues.

10. THE CARES PROCESS AFTER THE EVALUATION PHASE WILL INVOLVE SIGNIFICANT OPPORTUNITIES FOR PUBLIC DIALOGUE.

This report presents the options and associated costs for VISN-12 to realign its services to meet veterans' needs in 2010, and realign its capital assets to meet these needs. During the CARES process, VA has been sharing information and encouraging veterans and stakeholders to provide input. This input, together with the scoring of options utilizing the Absolute and Discriminating criteria, will provide the basis for VA selection of a set of options as well as proceeding to the last step of the VA's process—Implementation—in which VA will realign its assets to meet veteran healthcare needs in 2010.

11. THE FULL REPORT PRESENTS THE RESULTS TO DATE OF BOOZ·ALLEN'S STUDY OF CAPITAL ASSET REALIGNMENT OPTIONS FOR THE GREAT LAKES HEALTH CARE SYSTEM (VISN 12).

Booz·Allen & Hamilton's analysis of capital asset realignment options for VISN 12 is provided in two volumes. This first volume provides analytical findings and proposes a strategic plans for the restructuring of VISN 12 capital assets and the delivery of its healthcare services. The second volume (under separate cover) provides the results of applying the evaluation criteria generated by VA's CARES process to the SDOs proposed by in this report.

The *Introduction* of this report provides background on the study objectives and presents an overview of the CARES process. The second chapter discusses the *Supply of Healthcare Services in VISN 12*, addressing the current "as is" state of VISN 12 healthcare services, capacity, and facilities infrastructure. Chapter 3 identifies the *Demand for Healthcare Services*, recognizing historic, current, and projected market trends and veteran demographics. Chapter 4 presents the *Planning Principles* and associated analytical context from which SDOs are generated. The *Service Delivery Options* are explicitly discussed in Chapter 5, while the detailed *Capital Asset Realignment (CAR) Plans* for each option are provided in Chapter 6. Chapter 7 provides the life cycle *Cost Analysis* of the SDOs. Chapter 8 addresses the range of impacts resulting from "what-if scenarios" put forward in a *Sensitivity Analysis.* Appendices are also included to permit the reader greater visibility into any specific methodological techniques or unique data sets employed.